IEPA Log No.: **C-0006-13**
CoE appl. #: **LRC-2013-288**

Public Notice Beginning Date: **February 4, 2014**
Public Notice Ending Date: **March 6, 2014**

Section 401 of the Federal Water Pollution Control Act
Amendments of 1972

Section 401 Water Quality Certification to Discharge into Waters of the State

Public Notice/Fact Sheet Issued By:

Illinois Environmental Protection Agency
Bureau of Water
Permit Section
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276
217/782-3362

Name and Address of Discharger: James and Tracy Sprayregen – 521 Longwood Avenue, Glencoe, IL 60022

Discharge Location: Near Glencoe in NW 1/4 of Section 8 of Township 42N, Range 13E of the 3rd P.M. in Cook County.

Name of Receiving Water: Lake Michigan

Project Description: Proposed construction of a new steel and quarry stone breakwater beach and shoreline protection system

The Illinois Environmental Protection Agency (IEPA) has received an application for a Section 401 water quality certification to discharge into the waters of the state associated with a Section 404 permit application received by the U.S. Army Corps of Engineers. The Public Notice period will begin and end on the dates indicated in the heading of this Public Notice. The last day comments will be received will be on the Public Notice period ending date unless a commenter demonstrating the need for additional time requests an extension to this comment period and the request is granted by the IEPA. Interested persons are invited to submit written comments on the project to the IEPA at the above address. Commenters shall provide their names and addresses along with comments on the certification application. Commenters may include a request for public hearing. The certification and notice number(s) must appear on each comment page.

The attached Fact Sheet provides a description of the project and the antidegradation assessment.

The application, Public Notice/Fact Sheet, comments received, and other documents are available for inspection and may be copied at the IEPA at the address shown above between 9:30 a.m. and 3:30 p.m. Monday through Friday when scheduled by the interested person.

If written comments or requests indicate a significant degree of public interest in the certification application, the IEPA may, at its discretion, hold a public hearing. Public notice will be given 30 days before any public hearing. If a Section 401 water quality certification is issued, response to relevant comments will be provided at the time of the certification. For further information, please call Darren Gove at 217/782-3362.

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Fact Sheet for Antidegradation Assessment
For James and Tracy Sprayregen
IEPA Log No. C-0006-13
COE Log No. LRC-2013-288
Contact Brian Koch (217) 558-2012
Public Notice Start Date: February 4, 2014

The Applicant (Mr. and Mrs. James Sprayregen) has applied for 401 water quality certification for impacts associated with construction of a new steel and quarry stone breakwater along their south property line at 521 Longwood Avenue. The project is needed to prevent further erosion along the shoreline and the lake bottom areas. Project activities would include construction of a quarry stone and steel breakwater extending approximately 125 feet offshore from the existing revetment, with an 85 foot quarry stone breakwater angling to the northeast. A 35 foot quarry stone breakwater would be constructed along the north property line to help retain sand in the system. The breakwater would include stair access to allow accessibility to the south and north. Additionally, the existing quarry stone revetment would be rebuilt to provide additional shoreline protection and allow pedestrian access to the bluff. Breakwater construction would result in 0.08 acres of permanent fill to the lakebed. Approximately 2,055 tons of clean sand would be placed for beach nourishment, as required by IDNR.

Identification and Characterization of the Affected Water Body.

Lake Michigan (Segment QH-03) is a large oligotrophic lake subject to the Lake Michigan Basin water quality standards of 35 Ill. Adm. Code 302 Subpart E. It is listed on the draft 2012 Illinois Integrated Water Quality Report and Section 303(d) List as impaired for fish consumption (causes = polychlorinated biphenyls and mercury) and primary contact recreation (cause = Escherichia coli).

Identification of Proposed Pollutant Load Increases or Potential Impacts on Uses.

The construction activities would cause a temporary increase in suspended solids and habitat would be disturbed in the vicinity of the construction area. However, the project would provide shoreline stabilization by minimizing wave scouring and erosion from storm events. Over time, a net reduction of suspended solids loadings into the lake may occur. Installation of the breakwaters would remove the aquatic life uses of the existing benthic habitat, but the quarry stone would provide new diverse habitat for aquatic life.

Fate and Effect of Parameters Proposed for Increased Loading.

The increase in suspended solids would be local and temporary. The aquatic life uses disturbed by fill activities are anticipated to recover to pre-disturbance conditions over time.

Purpose and Social & Economic Benefits of the Proposed Activity.

The project would benefit the public by providing shoreline protection along Lake Michigan and providing benefits to visitors recreating along the shoreline.

Assessments of Alternatives for Less Increase in Loading or Minimal Environmental Degradation.

The construction of the proposed project would follow guidelines set forth by the Agency and USACE. The Applicant considered five different options before selecting the preferred alternative. A brief summary of each option is provided below.

Option 1 – Do Nothing: The "do nothing" alternative would leave the currently eroding shoreline and beach in its existing state. This is not a preferred alternative given that a lack of action would only result in increased deterioration.

Option 2 – Enhance the Revetment Only: This option would result in continued lakebed erosion (and revetment toe destabilization), inadequate protection of the bluff toe, substantial modification to the lower bluff to maintain the area's functionality, and a reduction in the amount of beach at this site.

Option 3 – Design a Small Pocket System: This is the preferred option. It would greatly enhance the level of shore protection at this property, retain sand, provide groin toe protection, and maintain a more stable beach cell system, all while allowing safe access to Lake Michigan.

Option 4 – Design a Smaller Pocket System (Groin with Small Headland): With the current lake conditions and narrow beaches during low lake levels, a smaller cell system would not adequately serve as shore protection.

Option 5 – Design a Larger Beach System: A larger beach system on this property is not necessary to adequately provide long-term shoreline protection. Designing a larger beach system was not pursued as an alternative.

Impacts to Lake Michigan would be minimized to the greatest extent possible. A marine contractor would survey the lake bed prior to mobilizing for the project. If the water is too shallow during construction, more trips with smaller barges would be made to minimize draft and reduce disruption of the benthos. Large, clean quarry stone would be used for construction which would minimize the amount of solids temporarily suspended in the water column. The least intrusive alternative would be to not complete the project, but this not an acceptable alternative given that this is a useful project that would improve shoreline stabilization and allow for continued recreation in this area.

Summary Comments of the Illinois Department of Natural Resources, Regional Planning Commissions, Zoning Boards or Other Entities.

The IDNR EcoCAT system was consulted on August 21, 2013 and it was immediately determined that protected resources (Glencoe Botanical Area INAI Site and Sea Rocket (*Cakile edentula*)) may be in the vicinity of the project location. The department evaluated this information and concluded that adverse effects are unlikely. Consultation was terminated in the August 21, 2013 letter from IDNR.

Agency Conclusion.

This preliminary assessment was conducted pursuant to the Illinois Pollution Control Board regulation for Antidegradation found at 35 Ill. Adm. Code 302.105 (antidegradation standard) and was based on the information available to the Agency at the time the assessment was written. We tentatively find that the proposed activity would result in the attainment of water quality standards; that all existing uses of Lake Michigan would be maintained; that all technically and economically reasonable measures to avoid or minimize the extent of the proposed increase in pollutant loading have been incorporated into the proposed activity; and that this activity would benefit the community at large by providing a stabilized shoreline along Lake Michigan. Comments received during the 401 Water Quality Certification public notice period will be evaluated before a final decision is made by the Agency.